Coordination and Governance in Transit: Lessons from Six Case Studies

June 29, 2023

Introduction and Lessons Learned

The Chicago Metropolitan Agency for Planning (CMAP) convened a steering committee to develop a "*Plan of Action for Regional Transit* (PART)" with recommendations that can help the Chicago region invest in a stronger and more financially secure transit system. This analysis was prepared by the Eno Center for Transportation to provide PART's Steering Committee with information about transit governance in six other metropolitan areas.

CMAP and Eno identified six regions with populations of more than four million and robust transit networks to examine. Four are located in the United States (New York, San Francisco, Seattle, Boston), one in Canada (Toronto), and one in Europe (London). The first section of this document summarizes the lessons that are relevant for the Chicago region, organized around ten key themes. In the Appendix are the detailed six case studies, each of which contains maps, descriptions of transit services and governance structures, selected privatization efforts, and coordination efforts and issues.

Influenced by three similar trends

Despite their differences, the case study regions have similar histories to the Chicago region.

For instance, the municipalities discussed in this document took control of privately operated bus and rail companies after the widespread use of automobiles made operating transit services unprofitable. Rather than having mayors directly control operations and fare policies, transit agencies were set up as publicly-owned authorities that were managed by an independent board of directors. Legislators selected this model because boards of directors (consisting of business and civic leaders) were expected to manage transit operations more efficiently than elected officials. For example, the New York City Transit Authority took over control of buses and subways in 1953, six years after the Chicago Transit Authority (CTA) began operating.

The next major shift occurred in the 1960s with more workers moving to suburban neighborhoods and commuting into central business districts. As metropolitan area expanded, regional transportation authorities were formed. The Massachusetts Bay Transportation Authority (MBTA) was created in 1964, seven years before the Chicago region's Regional Transportation Authority (RTA) was established.

More recently, technology has encouraged and forced transit agencies to work closer together to meet traveler's needs. Transit riders now have much higher expectations about their trips than they did in the 20th century. One reason is the widespread use of ridesharing apps. Uber and Lyft customers use one phone app to plan and pay for their trips, and riders can track their pickup and arrival times. Transit riders do not want to look at multiple maps and schedules to obtain that same information and prefer to use just one app to pay their fare. Higher expectations from both riders and elected officials have necessitated closer cooperation between transit agencies in every region.

Some regions are far more consolidated than others

Unlike Northeast Illinois, the Boston and London regions have one transit agency that controls nearly all of its transit services. In the Boston area, the MBTA operates light rail, heavy rail, commuter rail, trolley, buses, paratransit and ferries. The agency has been a division within the Massachusetts Department of Transportation since 2009. Transport for London, created in 2000, combines nearly all public transportation services and also regulates taxis, and manages major arterials and traffic controls. Land use and transportation planning are tightly integrated between the regional government and its 32 boroughs.

None of the other four regions we examined have one mega-agency that controls all its transit services. In fact, the San Francisco Bay Area has 27 different transit agencies which use different fare structures, discounts, wayfinding signage, and maps. New York's largest transit agency, the Metropolitan Transportation Authority (MTA), manages the subway and bus network, as well as two commuter railroads. However, the region also contains other very large transit agencies (including New Jersey TRANSIT and the Port Authority of New York and New Jersey) who operate their own transit services. The policies and services of these agencies are not closely coordinated.

In metropolitan Seattle, Sound Transit is a public corporation created in 1993 by King, Pierce, and Snohomish counties to build and operate a regional high-capacity transit system. King County Metro is the region's primary transit operator, serving the region's bus network and is contracted by Sound Transit to operate and maintain Link light rail. In Toronto, the city owns and operates its own transit services while a regional agency, Metrolinx, serves as the regional transportation authority and operates commuter rail and bus. A major difference between the regional entities in Seattle and Toronto is that most of Sound Transit's services are operated by the county governments while Metrolinx operates its own services.

It matters who establishes and manages agencies

The agencies in this case study report fall under five different types – those established and managed by (1) intercounty agreements, (2) counties, (3) cities, (4) regions, and (5) states.

An example of the first type is the commuter rail provider in the San Francisco Bay Area, Caltrain, which was established and managed based on an agreement between three counties (San Francisco, San Mateo, Santa Clara). The second type is seen in Washington's King County, the San Francisco Bay Area, and in New York's northern and eastern suburbs. There, the county governments manage and operate their own transit systems.

Toronto is an example of the third type where the Toronto Transit Commission (TTC) is the exclusive local public transit operator for the city, and is governed by a 10-person board, appointed by the Toronto City Council. The fourth type—regional authorities—exist in Seattle (Sound Transit), New York (MTA), and the San Francisco Bay Area (BART). The fifth type is found in Ontario, Massachusetts, and New Jersey where the state (or province) has established its own transit agency.

The transit service providers in the Chicago region fall under the third and fourth types. The CTA could be considered either a city or regional agency while Metra, Pace Suburban Bus, and RTA fit the regional authority model.

Levels of state support vary widely

Transit systems obtain varying levels of political support from state (and provincial) governments for various reasons. The city of Boston is the capital of Massachusetts and about 70 percent of the state's residents live in the Boston metropolitan area (about 73 percent of Illinois' population is in the Chicago metropolitan area.) Plus, Massachusetts is small which means most of the state's elected officials are familiar with the region's transit services.

In the New York metro area, transit enjoys widespread support by the private and public sectors because 31 percent of the region's workers commute by transit compared to 12 percent in the Chicago metro area. Furthermore, approximately two-thirds of the state's population live in the areas served by the MTA. That political support oftentimes translates into money. The state of New York has authorized numerous taxes to support transit including payroll, parking, fuel, sales, ridesharing, and real estate transfer taxes. The MTA also has high tolls on its tolled bridges and tunnels to support transit.

States can also enact laws that encourage transit. For example, Washington state does not contribute funds towards Sound Transit's rail building program, but it does have a Commute Trip Reduction Law. Many large worksites are required to develop and manage their own programs to reduce the number and length of drive-alone trips. Employers must conduct surveys every other year to measure vehicle miles traveled and mode choices and must also designate an employee transportation coordinator.

Agencies rely on a variety of funding sources including tolls

Transit agencies in the case studies use a wide range of funding sources for their operating and capital needs.

In 1996, voters in three counties in Washington State approved local funding (including sales and use tax, motor vehicle excise tax, and a rental car tax) to finance construction and operation of Sound Transit's express bus, and light rail lines. In 2008 and 2016, voters approved raising taxes again to expand the light rail, commuter rail and regional bus network.

In the San Francisco Bay Area, BART relies upon sales tax and property taxes while the metropolitan planning organization collects more than $600 million a year in bridge tolls and allocates these funds for bridge, highway, and transit projects. In Seattle, approximately half of King County Metro's fare revenue is paid by businesses and institutions, including Amazon, Microsoft, and the University of Washington. In Boston, the MBTA relies upon sales tax revenue that is collected by the state.

Toll revenue is an important funding source in New York and New Jersey. More than one billion dollars in annual toll revenues from the MTA's bridges and tunnels is used to support transit and in the most recent fiscal year, the NJ Turnpike Authority provided $721 million to NJ TRANSIT. From the transit perspective, New York's governance structure has an important advantage over New Jersey's in that the MTA sets the toll rates and how much of the toll revenue is used to support transit while NJ TRANSIT controls neither.

Two of the case study regions have (or will soon have) congestion pricing programs. New York is now poised to implement a program for vehicles entering Manhattan below 60th Street. The tolls have not yet been finalized, but they could range from $9 to $23 for cars during peak periods, and up to $82 for large trucks. In London, motor vehicles entering the center city during peak periods must pay a charge of 15 pounds (approximately $18.50). The program and its associated transit improvements has reduced traffic, improved bus reliability, and increased transit use.

Transit agencies have fewer riders and less fare revenue today than before the COVID-19 pandemic began in early 2020. To make up for the funding shortages and in anticipation of the elimination of COVID relief funds, both Seattle and New York have raised taxes to subsidize their transit services. In November 2020, 80 percent of City of Seattle voters approved a proposition extending existing taxes and authorizing additional ones. In April 2023, the New York state legislature and governor raised the employer payroll tax and the earnings of self-employed individuals.

Board set-up is often quite different

As shown in the case studies, a transit agency's board of directors can be set up in a number of different ways.

Some board members can help bring in outside funds and further coordination efforts between other government agencies. For example, NJ TRANSIT's chair is also the chair of the NJ Turnpike Authority. Board members can also encourage coordination between transit agencies. For example, at Seattle's Sound Transit, at least half of the board members (from each county) must serve on the governing authority of a local public transportation system. At Sound Transit, board members must be elected officials similar to the Chicago region's Pace whose board members must be either a current or former mayor or village president.

Ontario policy makers made a different choice when they set up Metrolinx. They thought it would be better not to have any politicians or government officials because that might lead to turf wars with local officials protecting their local interests. The thinking was that having board members with private sector expertise in finance, planning and other disciplines would accelerate project delivery in the Toronto region. However, the 15 citizen members must be recommended by the Ontario Minister of Transportation and approved by the province. This set up does not eliminate political interference in Toronto’s transit decisions because the province’s minister of transportation (an elected member of the Ontario legislative assembly) has considerable power in all decision-making.

When well-heeled board members do not use their own transit agency's services, they can be seen as out-of-touch with the needs and desires of their customers. To address that concern in San Francisco, SFMTA board members are required to ride Muni on average once a week. At least four of them must be regular Muni riders.

In the United States, board members at most transit agencies are supposed to be independent and serve for their full term of office. However, Transport for London was not set up with that intention. Board members usually hold their positions for two or four years, but they serve at pleasure of the mayor. The London mayor can terminate an appointment at any time by providing three-months' notice. Many boards ensure geographical diversity by requiring that its members come from different jurisdictions. NJ TRANSIT also ensures some political diversity by specifying a maximum number of board members can be from a single political party.

The number of *voting* members on the boards in this case study range from 9 to 18. The Chicago region's transit service boards all fall within that range: CTA has 7, Metra has 11, Pace has 13, and RTA has 16. Some boards also have *non-voting* members. For example, NJ TRANSIT has one board member who represents a bus union and another from a rail union, while the MTA's board in New York has a non-voting member who represents a state-sponsored riders' group. The MTA also has board members who do not have a *full* vote. Members representing four of the smallest suburban counties in the MTA service area collectively cast one vote. Some boards' elect their own chair, including the Chicago region's RTA, and the San Francisco Bay Area's BART and SFMTA.

Massachusetts and New Jersey have set up their transit agencies so they are closely tied to the state's transportation policies. That is why the state's transportation commissioner is the chair of MBTA and NJ TRANSIT. Likewise in New York City metropolitan area, the governor selects the MTA's chair. In Washington State, the state DOT secretaries sit on the Sound Transit Board while the agency's board chair rotates every 2 years between the three county executives. This helps promote a strong relationship between the regional transit agency that is building the new rail lines and the three counties in its service area that are providing most of the transit services.

Most transit agencies in the case studies require that appointees to boards are confirmed by a legislative body. In Chicago, the mayor's appointees to the CTA must be approved by the governor and the Chicago City Council, while the governor's appointees are subject to the approval of the mayor and the Illinois State Senate. Most of the RTA's board members, however, do not need to be confirmed.

Many transit agency boards also have advisory committees. For example, King County Metro has a regional transit committee that includes local elected officials, as well as geography-based committees, a special needs committee, and a paratransit advisory committee. King County also incorporates equity into its decision-making processes. It has a mobility equity cabinet with representation from low-income populations, communities of color, immigrants, refugees, limited English-speaking individuals, and people with disabilities.

King County Metro's Strategic Plan and its Service Guidelines incorporate equity-based principles that are used to evaluate, design, and modify transit services. When Metro makes major service changes, it conducts an equity impact review – each project establishes equity-focused goals to guide service planning, scenario development, and engagement.

Experience with privatization is mixed

These case studies have identified some innovative public-private partnerships. For example, NJ TRANSIT entered into a contract with a private firm to design, build, operate, and maintain a light rail line along the Hudson River waterfront near Manhattan. The 21-mile line with 24 stations has spurred both commercial and residential development. Before the pandemic, it was carrying more than 50,000 riders a day. In California, Caltrain provides passenger rail service along a rail line partly owned by Union Pacific Railroad. After the three counties entered into an agreement to initiate train service, they signed a contract with a private operator to operate it.

In New York's Nassau County, between 1973 and 2011, bus services were provided by a subsidiary of the MTA. In 2011, the county terminated this contract and entered into a contract with a private operator. In London, bus services were privatized in the 1980s and are now contracted out to 17 different private firms. Transport for London sets operating standards, such as punctuality and customer satisfaction, and the operators are paid based on performance. From the customer perspective, the bus system appears to be a seamless network.

Private firms also provide bus services for their employees. The buses provided by employers in the Seattle region (notably Amazon and Microsoft) carried approximately 10,000 riders before the pandemic. In the Bay Area, shuttle buses, operated by tech companies, carried approximately 50,000 workers daily before the pandemic. Facebook alone transported more than 6,000 people on 80 routes each day in early 2020. These shuttles have been praised and criticized for increasing real estate values in San Francisco because they have allowed many well-paid young people to live in the city and work in the suburbs.

In Ontario, the city of Innisfil (located about 50 miles north of Toronto) decided not to operate its own transit services. Instead, residents can take up to 30 subsidized trips per month using an Uberpool-based app. Riders pay between $4 and $6 when they travel to and from popular destinations such as the train station, town hall, library, and community center.

King County Metro works with groups of two to five employers to establish privately-funded and operated shuttle services. The shuttles operate under an agreement with Metro and under Metro's supervision. The routes and schedules complement and do not duplicate existing transit services. In March 2023, King County Metro launched an app-based on-demand ride service that costs users same as a transit fare. The app generates routes for riders using rail, bus, and Via minivans. The private firm, Via, is managing and providing rides in areas lacking bus or rail transit options.

Accountability and oversight is paramount

The leaders of the government body that established a transit agency are typically accountable for the transit services.

In New York and New Jersey, the governors control board appointments to the MTA and New Jersey TRANSIT. In the Seattle region, the county executives are responsible for their county-operated services as well as for Sound Transit. In London, the mayor is accountable for nearly all transit services in the region. In the San Francisco Bay Area, accountability is clear for each agency, but not consistent across the region. For example, voters in nine different BART districts determine BART policy, while the San Francisco mayor controls the SFMTA, and three county executives are responsible for Caltrain.

Accountability in the Chicago region in many ways is more dispersed. Figure 1 illustrates who appoints board members to CTA, Metra, Pace, and RTA.

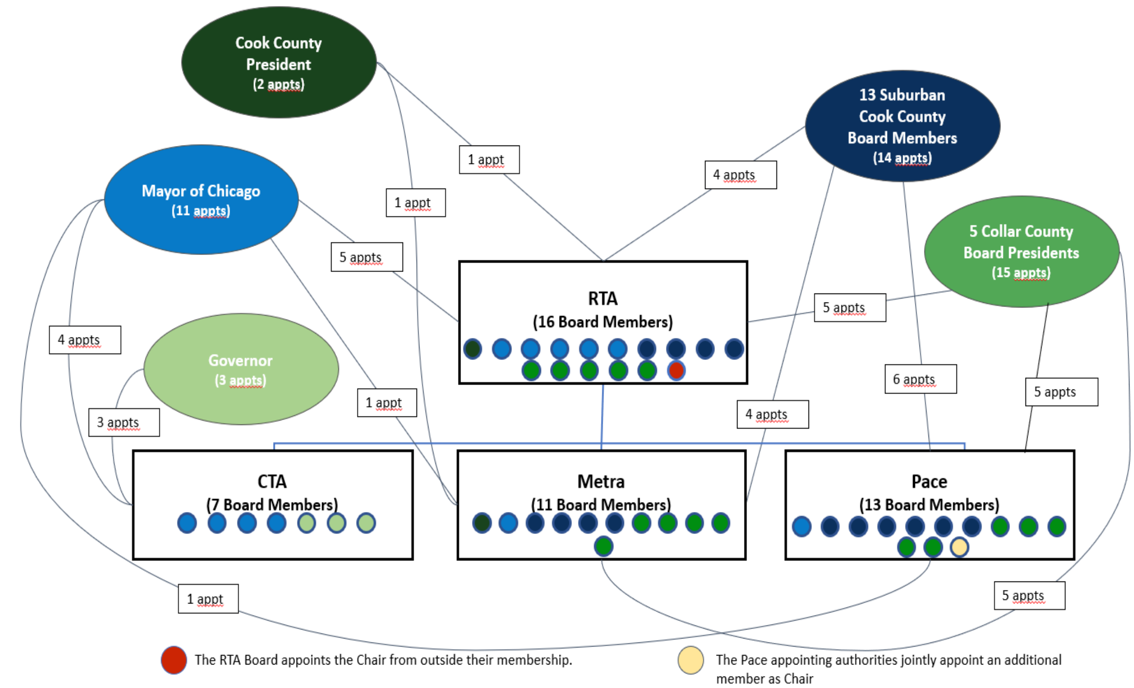


Figure 1. Transit governance in the Chicago region

Governments oversee powerful transit agencies in a variety of ways.

After the SFMTA approves a budget, it is then either approved or rejected by the 11-member San Francisco Board of Supervisors (7 votes are needed to reject a budget). In New York, the state's Capital Program Review Board must approve MTA's capital program. The Review Board's four voting members represent the governor, State Senate leader, State Assembly leader, and the New York City mayor. Each has veto power over the capital program, although the mayor only has veto power over NYC Transit's portion.

In 2018, San Francisco Bay Area voters authorized the establishment of BART's Office of the Inspector General to identify opportunities to improve the efficiency and effectiveness of BART operations, and the delivery of capital projects. The California governor appoints the Inspector General to a four-year term, based on the recommendations of the BART board of directors.

Fare coordination is common

Every region discussed in this document integrates fare payment in some manner.

In some regions, a single transit agency determines fare policies and associated technology for multiple modes. In the Boston metropolitan area, transit users purchase smart cards that can be loaded with cash value or passes to pay for MBTA's bus subway, commuter rail, and ferry fares. Transport for London's contactless Oyster Card appeared in 2003 and can be used on Transport for London's services as well as on most National Rail services. A cap limits how much London riders pay for all their journeys in one day or week. When the fares of transit riders add up to a certain amount, they are not charged for any additional rides. Transport for London sets different caps based on the times of day that riders travel and the services they use.

Sound Transit administers the Orca smart card that can be used on buses, light rail, streetcar, and monorail services provided by ten different agencies. The card offers multiple pass options with free transfers. Businesses in the Seattle region can purchase passes for unlimited rides on all bus and rail lines. Funds received from the purchase of regional passes are allocated in proportion to the total value of services used on each agency during the period in which the pass is valid.

When Ontario set up Metrolinx**,** the transit agency was given the charge to implement a card that could be used across the province. The same fare card that is used in Toronto can now also be used in Ottawa, 280 miles away. The San Francisco Bay Area's metropolitan planning organization, the Metropolitan Transportation Commission (MTC), manages the Clipper card that is used by 24 agencies. MTC was able to corral these agencies into accepting the same card because California has given MTC discretion in spending over hundreds of millions of dollars in annual federal and state funds. MTC uses these funds to get operators to adhere to its transit coordination requirements including those related to the Clipper card as well as 511 traveler information, regional transit hub signage, maintenance of coordinated service, transit rider surveys, fare and schedule requirements, and regional transit information displays.

Summary

One thing is clear: every approach to governance and transit funding reflects a unique combination of the history, laws, regional growth, geography, economic development, and specific local circumstances.

For example, the San Francisco Bay Area (including the cities of San Francisco, Oakland, and San Jose) has much more dispersed employment areas than the Chicago region. The New York metropolitan area is much larger and denser than the Chicago region, and its central business district relies upon bringing in workers from another state which is located only a mile away. Since population and employment are growing much faster in the Toronto region than in the Chicago region, the province of Ontario created a new agency in 2006 to lead an ambitious rail expansion program in the Toronto area.

The Seattle region has very different needs and opportunities than the Chicago region. After voters in the Puget Sound area rejected referendums to build rail in 1968 and 1970, the region came to rely upon an extensive bus network. Sound Transit, which was established in 1993, is now undertaking one of the most ambitious rail expansion programs in the country. The Chicago region, on the other hand, has an extensive and aging rail system that is expensive and challenging to maintain and upgrade.

Therefore, even if it was practical, there is no way to fully replicate the governance model of any of the case study regions. It is, however, instructive to understand what it would mean to do so for the Chicago region. For example, if it were to adopt the Boston model, then CTA, Metra, and Pace would be merged into a state department that would also be responsible for the state highways. Likewise, in New York's MTA model, the Governor of Illinois would have the final say in most transit decisions.

If the Chicago region functioned like the Puget Sound, then Cook, DuPage, Kane, Lake, McHenry, and Will counties would each operate their own bus systems. The San Francisco governance structure would further disintegrate those services into dozens of local transit agencies. If Toronto's model were to be used, the City of Chicago would operate its own buses and trains, city council members would control the transit agency's board, and an Illinois state agency would serve as the regional transportation authority and run Metra and Pace.

Although the London model is tantalizing for its regional reach and highly efficient and extensive transportation network, creating it in Illinois would be an enormous undertaking. The state legislature would have to create a new regional government with broad responsibilities for transportation, land use, and housing. It would also have to create a regional "mayor" to oversee the entire urban transit network and serve as the official chair of the board.

Nevertheless, each of the cases have important lessons for the Chicago region and elements from each can be tailored and implemented, as appropriate.

Appendices

Metro New York

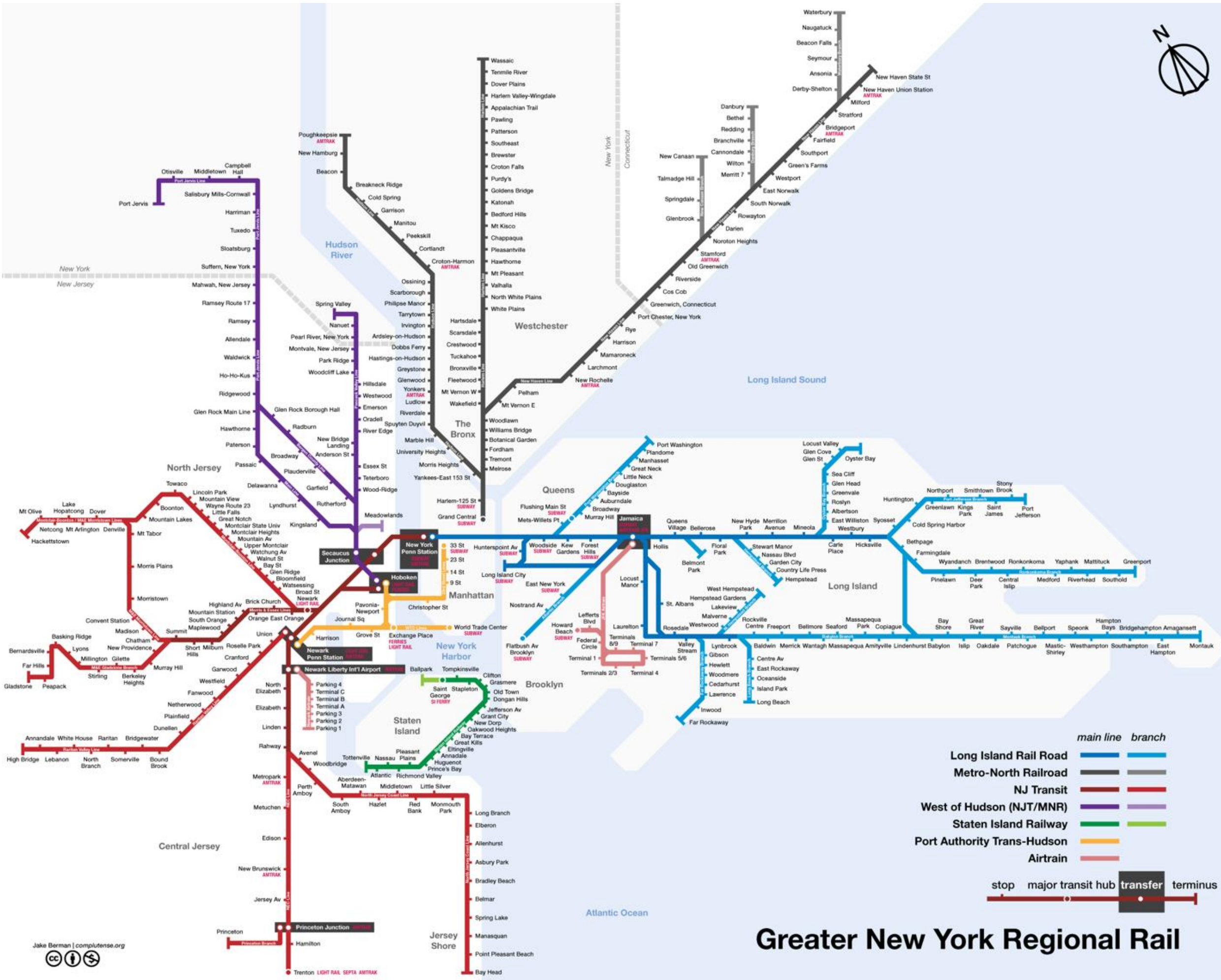
San Francisco Bay Area

Seattle Metro Area

Greater London

Metropolitan Boston

Metro New York



Greater New York Regional Rail
Source: Jake Berman

When it comes to public transportation in the United States, the New York metropolitan area is an outlier. With more unlinked transit trips than the next 15 largest systems combined, the area encompassing New York City, its suburbs, northern New Jersey, and southeastern Connecticut dwarfs all other U.S. regions. The transit network is large, complex, and heavily rail-intensive, with three separate—and extensive—commuter rail systems, two subway systems (one of which is among the largest anywhere in the world), and light rail. The bus network is also the nation's largest, with one dominant operator and numerous smaller ones. The system's transit options also include ferries and an aerial tram.

Given that the region has such a large and complex system, includes portions of three states and numerous layers of state and municipal government, and has been in operation for over a century, it would be surprising to find a governance structure that lacked challenges. While the current governance structure certainly offers room for improvement, the region's major transit issues do not necessarily stem from jurisdictional turf battles. Conflicts certainly exist between different governing bodies, but the real problems revolve around service coordination and funding.

Both of these issues could potentially be improved through stronger regional governance structures, but some improvements can only be achieved with more effective leadership from elected officials.

New York City—and to a lesser extent the surrounding suburbs—uniquely rely on the transit network given its density and concentration of major economic activity in the urban core. Transit funding is strongly supported by the public and a wide range of corporations, real estate firms and civic organizations. As a result, transit use is higher and car ownership lower than the rest of the United States. About 28 percent of the nation's zero-vehicle households live in metropolitan New York, with metro Chicago a distant second with just over five percent.[1] In the New York metro area, 31 percent of workers commute by transit compared to 12 percent in the Chicago metro area.[2]

The New York City region holds enormous political power in state government in part because approximately two-thirds of the state's population live in the areas served by the MTA (about 73 percent of Illinois' population is in the Chicago metropolitan area). Because of the region's influence, its heavy reliance on transit, and the MTA's enormous funding needs, the state has taken an active role in managing and funding the region's transit system. New York State has authorized numerous taxes to support transit including payroll, parking, fuel, sales, ridesharing, and real estate transfer taxes.[3]

Metropolitan Transportation Authority

The Metropolitan Transportation Authority (MTA) is, by far, the largest transit agency in the United States. It is a massive agency with six operating agencies, as shown in the table below.

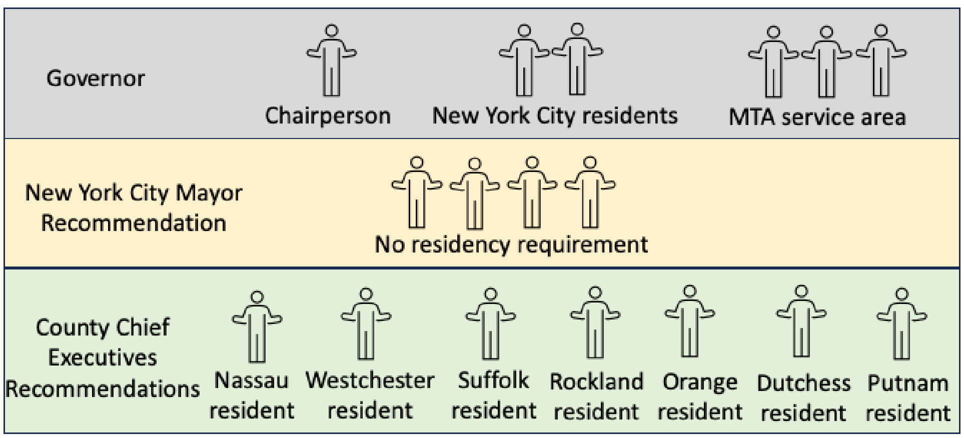
Bridges and Tunnels	Seven bridges and two tunnels in New York City, handling more than 329 million vehicle crossings each year
Construction & Development	Plans, constructs, and rebuilds the transit network infrastructure
Long Island Rail Road	Busiest commuter railroad in North America, carrying approximately 200,000 customers each weekday on 947 daily trains
Metro-North Railroad	Commuter rail trains in and out of New York City, mostly from Connecticut, also through New Jersey to New York's northern suburbs
MTA Bus Company	Local and express buses in the Bronx, Brooklyn and Queens
New York City Transit	Manages, maintains, and runs subway and bus service in New York City

Operating agencies of the Metropolitan Transportation Authority (MTA)

In 1940, a New York City agency took control of the city's subways from private bankrupt firms and managed them along with buses and streetcars. In an attempt to manage the subways and buses more efficiently and effectively than the mayor, in 1953 the state legislature shifted responsibility from the city to a new transit entity: the New York City Transit Authority. In the 1960s, the state created the MTA which consolidated the city's buses and subways, the bankrupt Long Island Rail Road, and the Triborough Bridge & Tunnel Authority. The bridges and tunnels were a coveted source of revenue via vehicle tolls that would be used subsidize the transit operators. In 1983, Metro-North was brought under the MTA umbrella. Over time and to this day, the MTA has been consolidating tasks once performed separately by the agencies.

The MTA also operates seven bridges and two tunnels in New York City, handling more than 329 million vehicle crossings each year. Each of these facilities are tolled which generates significant revenue for transit—about $1.14 billion in 2019.[4] That same year, the New York State legislature approved a congestion pricing zone in Manhattan south of 60th Street. (See below for more information).

The MTA's board consists of 17 voting members, including a chairperson, two non-voting members, and four alternate non-voting members. Each member is appointed for six-year terms. New York's governor has significant authority as all voting members, including the chairperson, are nominated by the governor and must be confirmed by the state senate. Four members are *recommended* by New York City's mayor and one each by the county executives of Nassau, Suffolk, Westchester, Dutchess, Orange, Rockland, and Putnam counties. Six rotating non-voting seats held by representatives of organized labor and the Permanent Citizens Advisory Committee (the coordinating body for three riders councils).[5]



Constitution of MTA Board of Directors

A majority vote is required for Board actions, except for certain non-competitive bidding. There are no veto powers and the members representing the outermost suburban counties—Dutchess, Orange, Rockland, Putnam—cast one collective vote (these members are wryly described as "quarter pounders"). State law specifically stipulates that board members must have expertise in "transportation, public administration, business management, finance, accounting, law, engineering, land use, urban and regional planning, management of large capital projects, labor relations" or a related field.[6]

MTA board members are not paid although it is considered a high-profile public service role. The Office of the MTA Inspector General is responsible for conducting monitoring and oversight of MTA activities, programs, and employees. New York's State Comptroller conducts regular audits of MTA management and operations.

Service planning is performed by the individual operating agencies. In 2022, the MTA's operating budget was $19.4 billion. The major funding sources came from passenger fares (23 percent), tolls (12 percent), dedicated taxes and local subsidies (37 percent), and federal covid aid (15 percent). The taxes include those on petroleum business, mortgage recording, real property transfer, for-hire vehicle surcharge, and payroll. In April 2023, the New York State legislature and governor raised the MTA mobility tax rate in New York City (but not for counties outside the city). This a tax imposed on the payroll expense of employers and the net earnings of self-employed individuals engaging in business. This tax increase is expected to generate an additional $1.1 billion for the agency.[7]

The MTA Board is responsible for approving the agency's capital programs. However, after it does so, an independent state board must also consider and approve the plan. The MTA Capital Program Review Board consists of four members, each appointed by the governor, including the chairperson. The president of the state senate, speaker of the assembly, and New York City mayor each *recommend* a member for the governor's consideration though the mayor's recommended member only votes on program elements related to the New York City transit agency.[8]

Every five years, the MTA prepares a 20-Year Needs Assessment which informs the five-year capital program. The process is informed by performance measures and shaped by the governor's office. The MTA's 2020-2024 Capital Program is $54.8 billion with funding sources expected to come from congestion pricing ($15 billion), 'new revenue sources' ($10 billion), MTA bonds ($9.8 billion), federal ($7.5 billion), state ($3 billion), city ($3 billion), and FTA New Starts ($2.9 billion).[9] These numbers are overly optimistic and have not been publicly updated since 2019.

In 2019, the MTA Board approved a sweeping reorganization plan that shifted power for the planning and management of capital programs from the operating agencies to the MTA.[10] In essence, the reorganization focused the operating agencies on their core mission to provide transit service, and centralized the supportive services such as legal, human resources, engineering, and construction work with the MTA. The plan is estimated to eliminate about 2,700 jobs and save the MTA over a half-billion dollars each year.[11] In 2020, the MTA created a Construction and Development division to manage the capital program. Planning for the next capital program is expected to be done in a more consolidated manner than previous capital programs.

In the 1990s, before undertaking its most recent expansion projects (including East Side Access and the Second Avenue Subway) MTA executives established an interagency task force to coordinate the long-term studies underway at its transit subsidiaries. The goal of the task force was to make sure that all of the studies for the major projects were evaluated consistently so that the MTA board could choose the best projects to advance. Planners from the MTA agencies met regularly to develop a common set of regional forecasts along with evaluation criteria that would be used to assess and compare all the projects. They also explored potential clashes and overlaps, as well as how projects would relate to one another as part of a regional transit network. However, their efforts were usurped by New York's governor George Pataki, who prioritized his suburban political base over the city's transit needs.

In 2019, when MTA was facing weighty funding gaps in its capital program, New York's governor and legislature agreed to implement a congestion pricing program with revenues dedicated towards transit improvements. Under the plan, drivers would pay a toll to drive into Manhattan south of 60th Street. In 2021, New York completed the environmental assessment of its proposed "Central Business District Tolling Program" and in May 2023, the Federal Highway Administration determined that the program would have no significant impacts. That has kicked off a public comment period which ended on June 12, 2023.[12]

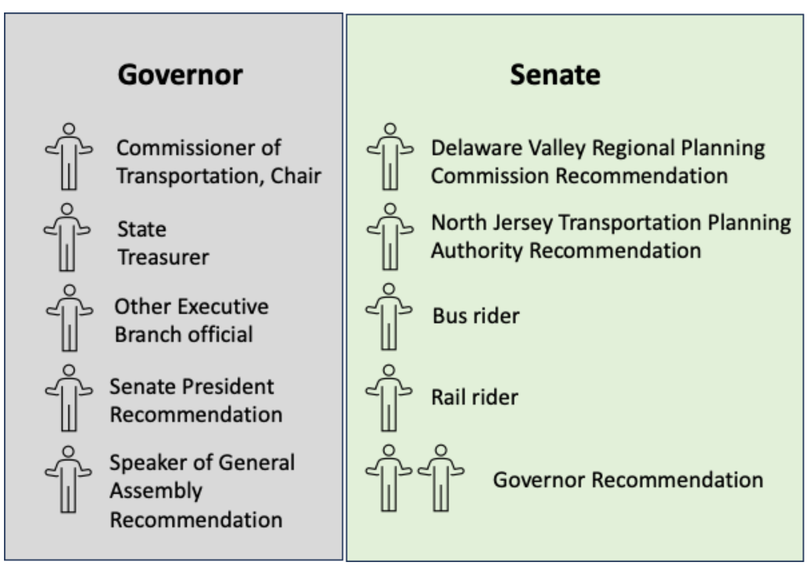
The toll rates have not yet been finalized, but they could range from $9 to $23 for cars during peak periods, and up to $82 for large trucks. The MTA will determine the final toll structure after receiving recommendations from its Traffic Mobility Review Board, the members of which are appointed by the MTA board and must have expertise in public finance, transportation, or management. The program is expected to have widespread benefits including reducing traffic, improving air quality, providing approximately $1 billion annually for transit improvements, and reducing vehicle travel time.[13]

Other key regional transit operators

While the New York MTA is, by far, the largest transit agency in the United States, several other large transit agencies operate in the New York region, though not as coordinated as they could be.

The New Jersey Transit Corporation (NJ TRANSIT) is the third-largest transit system in the United States providing over a half million unlinked passenger trips each workday. It provides an extensive network of bus, commuter rail, and light rail services throughout the state. It's FY23 operating and capital budgets were both around $2.7 billion.[14] About 26 percent of its revenue comes from passenger fares.

The NJ TRANSIT Board consists of 11 voting members including three state officials (the state transportation commissioner, state treasurer, and another member of the state's executive branch selected by the governor) and eight public members with transportation experience. The eight public members all need State Senate confirmation except the two recommended by leaders from the General Assembly and Senate. Public members serve four-year, staggered terms and no more than three of the six public members that are not recommended by the legislative leaders can be members of same political party. Two non-voting members are appointed by the governor upon the recommendation of rail and bus labor unions, and the state transportation commissioner serves as chair of the board. Board members are not paid.



Constitution of NJ TRANSIT Board of Directors

The other large transit provider in the region is the Port Authority of New York and New Jersey which operates PATH rail services between New Jersey and Manhattan, as well as the region's airports, bridges, tunnels, and bus stations. It is governed by a bi-state board of commissioners with each state's governor appointing six members, though subject to approval of their respective state senates. Members serve overlapping six-year terms without pay. The commissioners follow priorities of their respective governors in part because the governors can veto minutes (and actions) of board meetings. It is a longstanding tradition that the governor of New Jersey appoints Port Authority chair, while the governor of New York appoints executive director and vice chair.[15]

PATH's $287 million operating budget is part of Port Authority's total budget of $3.7 billion.[16] The Port Authority can use airport revenues to subsidize its transit operations because the 1982 federal law that prevents airport revenues from being used for non-aviation purposes contains a grandfather provision exempting the Port Authority.[17]

In 1973, Nassau County purchased equipment, routes and facilities from private bus operators. It entered into an agreement for the MTA to operate the buses under different names including the Metropolitan Suburban Bus Authority and MTA Long Island Bus. In 2011, the county ended the contract with the MTA and brought in a private operator Veolia (TransDev) to run service, rebranded to NICE (Nassau Inter-County Express). In 2000, the operator chose to eliminate some bus routes after the county cut its expected contribution.[18] Westchester County owns the Bee-Line buses, and also contracts out operations and maintenance to private carriers.

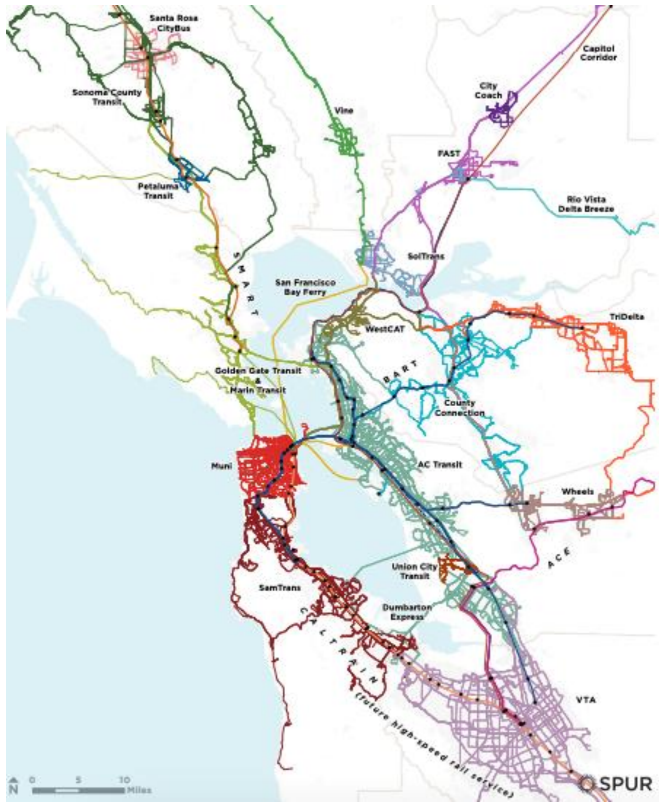
Coordination: Fare policy is not integrated

In the New York metropolitan area, there are no free transfers, discounts or regional passes between MTA, PATH, and NJ TRANSIT. Even though the agencies serve some of the same train stations, there is no integrated fare policy. Likewise, they have developed their own fare payment technologies. The MTA does have passes and discounts that can be used on both its buses and subways, also riders can purchase monthly tickets that offer a discount to customers who use both Metro-North trains and Westchester County's Bee-Line buses.

On MTA's subways and buses, riders pay fares using a smart phone application, magnetic farecards (MetroCard), and OMNY contactless cards (credit, debit, reloadable prepaid). The MTA offers its own discounts and passes. On Metro-North and the LIRR trains, riders use paper tickets and MTA's TrainTime app, though OMNY is expected to be available on these trains by 2025.[19] PATH is installing its own contactless payment system and currently it has its own magnetic card and smart card, although it does accept MetroCards which are being phased out. NJ TRANSIT has its own paper tickets and phone app. The Nassau County bus does not accept OMNY, though Westchester County expects to do so by 2025.

In terms of planning coordination, as noted, the MTA now develops one capital program for all of its agencies. NYC Transit has to work closely with New York City on Bus Rapid Transit planning because the city controls the streets. LIRR, Amtrak, and NJ TRANSIT operate a joint command center for trains at Penn Station. However, the Port Authority, NJ TRANSIT and the city of New York each develop their own service plans and capital programs with minimal coordination. Tellingly, even though service overlaps and patrons routinely switch from one transit provider to another, there is official map showing the entire regional transit network. The metropolitan planning organization for the New York part of the region—the New York Metropolitan Transportation Council (NYMTC)—neither plans nor prioritizes capital projects.

San Francisco Bay Area



San Francisco Bay Area's multiple transit providers
Source: SPUR

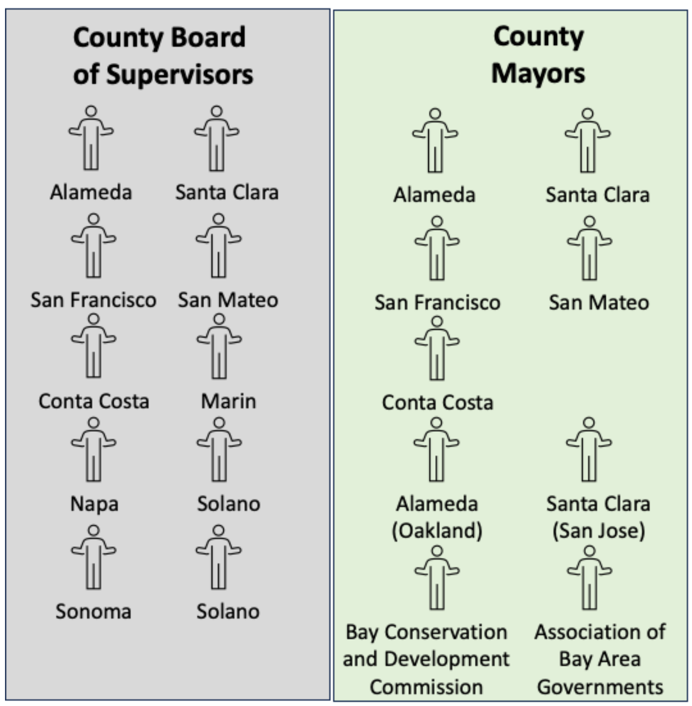
The San Francisco San Francisco, Oakland, and San Jose all grew with very different political, urban and, ultimately, transportation governance structures. As suburban populations centers grew and spread, localities created their own transit agencies and funded the services with little or no state financial assistance.[20] Today, there are 27 transit agencies and only 54.5 percent of the transit trips in the region are provided by the largest transit operator (the San Francisco Municipal Transportation Agency (SFMTA), compared to 86.2 percent for the Chicago region's largest operator (CTA).[21] Today, transit oversight, appointments, and budget reviews are conducted by numerous local, regional, and state agencies.

History and state funding laws have contributed to the uncommonly large number of transit operators in the area. Geographical features functioned to separate different parts of the region, resulting in a patchwork of local agencies that over time have expanded to create better regional connections. Further, state funding for county transit agencies created many new operators when it was introduced in the 1970s. The resulting proliferation of transit agencies can and does create some level of chaos in the region. However, the region’s MPO, the San Francisco Bay Area's Metropolitan Transportation Commission (MTC) has managed to exert significant control over the transportation network.

Metropolitan Transportation Commission

In 1970, the Metropolitan Transportation Commission (MTC) was created by the California Legislature to plan, finance and coordinate the Bay Area's transportation system and serve as the MPO for the 9-county Bay Area. In 1989, the legislature required MTC to adopt rules and regulations to promote fare and schedule coordination. In 1996, MTC authorized to identify functions that could be consolidated and condition certain funds on compliance with coordination requirements.

The MTC Commission is the agency's governing board and is made up of 18 voting commissioners, plus three non-voting members from the state and federal government. Appointments are mostly made by county boards of supervisors and mayors and the commissioners themselves are largely county supervisors, mayors or city council members. Ten county boards of supervisors choose one member each. The mayors of five counties choose one member each and the mayors of the two largest cities—San Francisco and San Jose—choose one member each. The Association of Bay Area Governments (ABAG) selects a member, as does the Bay Conservation and Development Commission (BCDC), though that member must be a resident of San Francisco.[22]



Constitution of the Metropolitan Transportation Commission

Commissioners also serve as the board for other authorities including Bay Area Toll Authority (operator of seven state-owned bridges), and authorities that manage freeway tow trucks, emergency roadside call boxes, and express lanes.[23] MTC collects more than $600 million each year in bridge tolls, and allocates these funds for bridge, highway, and transit projects.[24] Commissioners also share governing responsibilities for Bay Area Housing Finance Authority.

Other key regional transit providers

The San Francisco Bay Area has 27 transit operators including San Francisco Municipal Transportation Agency (Muni), Bay Area Rapid Transit (BART), and Caltrain. In addition, shuttle services are provided by universities, transportation management associations, and Silicon Valley technology companies.[25]

The SFMTA is the largest provider in the region and is responsible for the Municipal Railway (Muni), roads, taxis, bicycling, sidewalks. Muni operates buses, light rail, streetcars, cable cars. SFMTA was established by voter mandate in 1999 and combined multiple San Francisco city agencies including the Department of Parking and Traffic, Muni, and since 2007, the Taxi Commission.

SFMTA is governed by seven board members who each serve four-year terms and elect a chair and vice chair each year. Each member is appointed by the mayor of San Francisco but must be confirmed by the San Francisco County Board of Supervisors (the city and county are conterminous) and all must possess significant knowledge of, or professional experience in government, finance, or labor relations. At least four directors must be regular Muni riders and must continue to be regular riders during their terms, and at least two must possess significant knowledge or professional experience in public transportation. It is stated policy that during their terms, all directors should ride Muni on average once a week and are eligible to receive "reasonable compensation for attending meetings."[26] A simple majority is required to approve board items.[27]

After the SFMTA proposes to change fares or abandon a route, the San Francisco County Board of Supervisors can reject the change if 7 of 11 supervisors vote against it. .[28] Similarly, the Board of Supervisors can either approve or reject, but not amend, the agency's budget. A super majority is required to reject the budget.[29] The agency has a number of advisory committees including its Citizens' Advisory Council, Bond Oversight, and Paratransit Coordinating Council.

The agency's proposed FY23 operating budget is $1.4 billion, the largest shares of which come from general fund transfers (30 percent), parking, traffic fees, fines (10 percent), Federal relief (12 percent), passenger fares (8 percent), and a parking tax (4 percent.)[30] Its 20-year capital plan is updated every two years and is not fiscally constrained. Rather, it is used as a planning tool to identify all capital investments that support its strategic goals and objectives. SFMTA's five-year capital improvement program (2023-2007) is $2.6 billion and is fiscally constrained.[31]

The California State Department of Transportation (Caltrans) provides funding through numerous programs including its Active Transportation Program, Cap & Trade, Transit & Intercity Rail Capital Program, and Safety Improvement Program. The California Public Utilities Commission has jurisdiction over rail transit safety, including the municipal rail systems operated by SFMTA. Per state law, the MTC conducts performance audit every three years to determine whether transit operators are in compliance with certain statutory and regulatory requirements, and to assess the efficiency and effectiveness of the operator's services.[32]

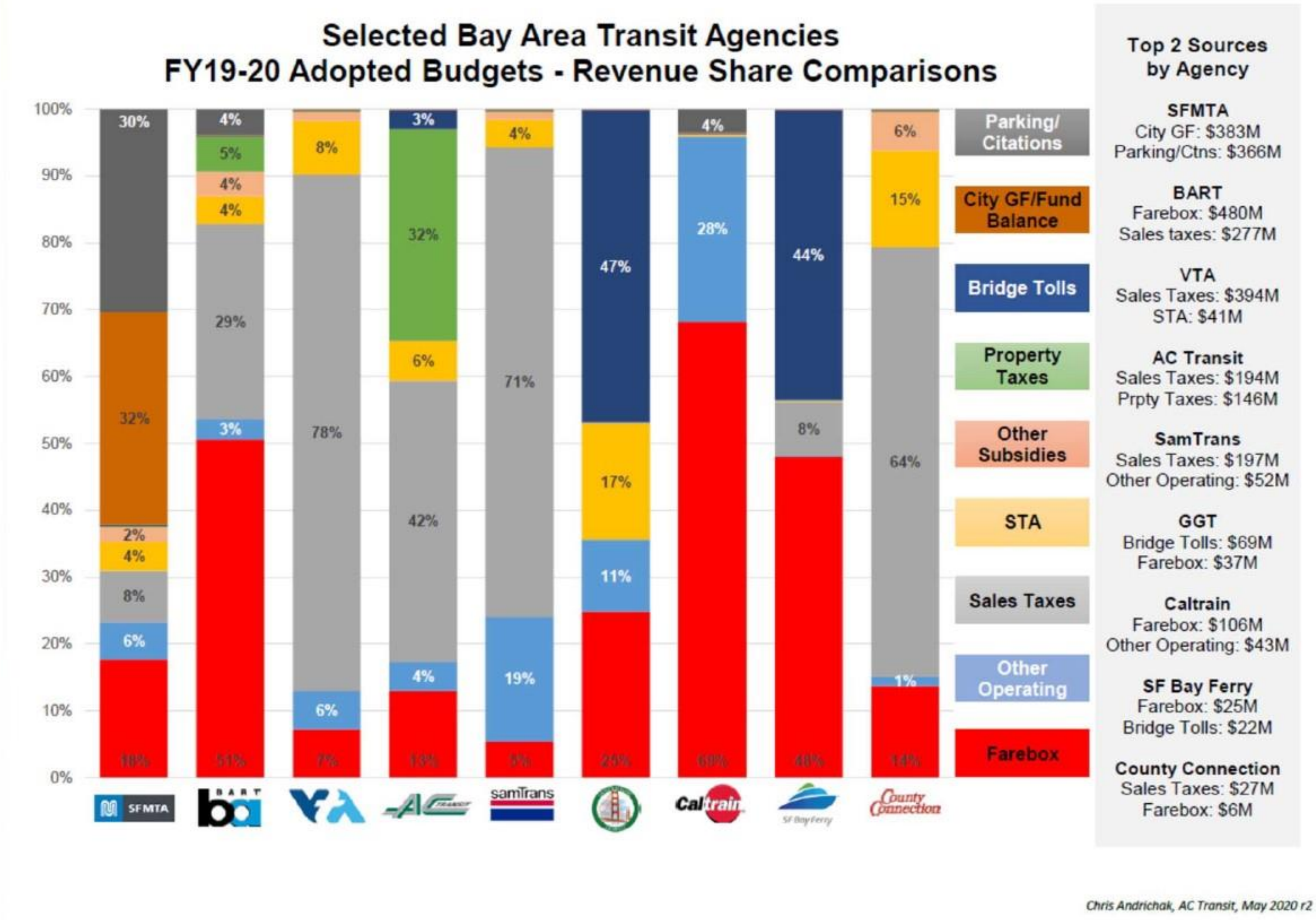
The operator of the nation's seventh-largest heavy rail system is BART. The California state legislature created the San Francisco Bay Area Rapid Transit District in 1957 to "build and operate a high-speed rapid rail network linking major commercial centers with suburban sub-centers."[33] Construction began in 1964 and service started in 1972. Today, the state's role is limited to appropriating funding and authorizing borrowing, though the governor does appoint the BART Inspector General to a four-year term.

The BART board of directors is unique in that its nine members are each elected to serve four-year terms, and each is the sole representative of their BART district. Directors must live in the district they represent. Directors sit on ten different advisory committees including Accessibility, Police Citizen Review, Earthquake Safety, and Limited English Proficiency. Board action requires either a majority or two-thirds vote of the Board, depending on the action under consideration. BART board members receive free passes to ride the system. They also receive a $1,000 monthly stipend as well as health benefits.[34]

Based on the ridership forecast and operational constraints, BART's service plan determines headways, average passenger load, and number of rail cars required. BART's FY22 operating budget is $1.02 billion with about 37 percent coming from federal emergency ($386 million). Other major revenue sources include a regional sales tax, fares, property taxes, state assistance, and parking. BART is facing a $143 million budget deficit by 2025, which is expected to grow to $300 million annually by 2026. BART's proposed 2023 capital budget is $1.5 billion with 29 percent of the revenue coming from the MTC.[35]

Caltrain is the region's commuter rail serving three counties (San Francisco, San Mateo, Santa Clara) with one line partly owned by Union Pacific Railroad. After the counties entered into an agreement to initiate train service, they signed a contract with a private firm to operate it. Caltrain's governing body is the Peninsula Corridor Joint Powers Board, which consists of three representatives appointed by each of the three counties served. Directors are not paid. Caltrain is managed by the San Mateo County Transit District.

The region relies on private shuttle operators, particularly in the technology sector. Pre-pandemic, these tech companies shuttle buses carried approximately 50,000 tech workers daily in the Bay Area and if operated by one agency, it would be 5th largest transit regional provider. Facebook, for example, transported more than 6,000 people on 80 routes each day in early 2020.[36] These shuttles are both praised and criticized for increasing real estate values in the urban core since young people working in the suburbs could more easily choose to live in the city. The SFMTA's Commuter Shuttle Program charges these firms a fee and requires shuttle operators to adhere to its regulations on routes and shuttle stops in San Francisco.[37]



Coordination: A major focus but a work-in-progress

In the San Francisco Bay Area, the MTC has discretion over hundreds of millions of dollars in annual federal funds. Transit agencies also receive funds from MTC based on formulas. To receive state transportation assistance funds, operators must adhere to MTC transit coordination requirements including those related to 511 traveler information, regional transit hub signage, all-in-one transit card implementation, maintenance of coordinated service, transit rider surveys, fare and schedule requirements, regional transit information displays.[38]

MTC's Transit Core Capacity Challenge Grant program provides $7.5 billion in funds (over 15 years) for capital improvements to three largest agencies which must meet performance and efficiency targets. MTC is using federal, state, and local funds including revenue from state's Cap and Trade program and bridge toll revenue.[39] Sometimes, MTC endorses funding projects for which it does not otherwise play a coordinating role. e.g., FTA's Capital Investment Grants program funds for Muni Central Subway and BART Silicon Valley Extension.

As noted above, MTC discretionary funds were dependent upon transit agencies accepting regional fare card. The Clipper card is a reloadable contactless smart card that is used by nearly all rail, bus, ferry agencies in the region, and is accepted on the Bay Wheels bike sharing service. Transit agencies using Clipper as their fare payment system are required to enter into a Memorandum of Understanding (MOU) among MTC and the other transit agencies. The MOU details numerous aspects of the program including administration, agency and MTC responsibilities, and how costs and revenues are allocated between the agencies. The governing body is the Clipper Executive Board which was formed by an MOU between MTC and the Bay Area transit agencies and consists of members from those agencies.[40]

Riders can use a single Clipper card to pay for fares. However, the policies for transferring and using passes for more than one transit service are complicated. In 2018, a non-profit advocacy organization "Seamless Bay Area" was set with the mission to "transform the Bay Area's fragmented and inconvenient public transit into a world-class, unified, equitable, and widely-used system."[41] It generally has the view that MTC board members view issues through a narrow local lens rather than a broad regional one. It works with another strong advocacy group, SPUR, for developing an integrated regional network that operates seamlessly.

In 2021, the MTC's Blue Ribbon Transit Recovery Task Force to look at a more integrated regional fare system. It recognized that the high level of transit fragmentation in the region meant agencies pursue their "own unique policies, procedures, and operating practices best suited for their immediate service areas and local priorities; and not organized to support customer-friendly, interagency travel." It recommended strong collaborative action including a fare coordination pilot project, regional mapping, way-finding standards and real-time data standards, and a transit hub toolkit to optimize station design and connectivity.[42]

The MTC is now subsidizing $6 million, two-year pilot program for 50,000 university students and affordable housing residents. Participants receive a single pass with free access to all bus, rail and ferry services in region. The universities participating had previously provided single-agency transit passes. MTC will evaluate impacts to travel patterns.[43]

The task force also analyzed potential transit "network management" reforms where one institution would be empowered to set regional transit policy. A 2021 report identified potential roles of a regional network manager (as opposed to the individual operators) when it comes to strategic vision, standards and guidelines, project prioritization, project funding, infrastructure development and design, infrastructure delivery, and network service planning.[44] MTC subsequently established an advisory group to develop a Regional Network Management Framework, which MTC approved in February 2023. The framework is a work in progress, but it does create a Regional Network Management Council (consisting of transit operator general managers) along with two to three staff members who will address regional transit needs. The council does not yet have precise authority.[45]

With California now facing an estimated $22.5 billion deficit, the governor's proposed budget (for fiscal year beginning July 1) calls for a reduction in transit *capital* funding. In March 2023, the California Assembly's transportation committee unanimously approved a bill that would establish a *state-wide* transit task force to study and develop recommendations on how to reform public transit across the state.[46]

Seattle Metro Area

Seattle Metropolitan Statistical Area

The Puget Sound region around Seattle, is a fast-growing region with 4.3 million people that continues to attract a range of workers, particularly those in the technology sectors. To manage the region's growth and mitigate chronic traffic problems, the region is embarking on one of the natin's most ambitious transit expansion plans, with voters approving three major ballot measures to fund light rail system expansion in 1996, 2008, and 2016.[47] Each raised sales tax revenues in the counties in and around Seattle to plan and construct transit expansion across several modes. Rail milage is expected to be 62 miles by 2026 and 116 miles by the 2040s.[48]

The Puget Sound Regional Council (PSRC) is the MPO. Its governing council has a General Assembly with more than 100 members, representing four counties (King, Kitsap, Pierce, Snohomish) and the cities and towns within those counties. The General Assembly meets once a year with most issues decided in advance of the meeting.[49] The total number of votes cast by counties and jurisdictions is based upon population. A 2/3 majority is needed to adopt or amend the regional transportation plan, regional growth management strategy, annual work program and budget.[50] An Executive Board carries out all administrative responsibilities and its members are all local elected officials.[51]

King County Metro and Sound Transit

The region's two major transit operators are King County Metro and Sound Transit. Other operators include Community Transit (public transit authority of Snohomish County), Pierce

Transit, Kitsap Transit, Everett Transit, Intercity Transit, Island Transit, Skagit Transit, and Washington State Ferries.

In 1973, the Municipality of Metropolitan Seattle (Metro) began bus services (integrating city and suburban services) which was funded by sale taxes.[52] Metro merged with the King County government in 1994. Today, King County Metro is the region's largest transit operator and the 9th largest in the nation. It provides bus, paratransit, vanpool, and water taxi services and also operates Sound Transit's Link light rail and some of Sound Transit's express bus services. The City of Seattle owns two streetcar lines and contracts with Metro for operations.

The King County Executive nominates Metro's general manager who must be confirmed by the county council.[53] According to a recent interview, the current executive notes that he typically spends between 10 to 20 percent of his time on transit related matters.[54] As a county-level agency, Metro does not have a board of directors like an independent regional agency might. Instead, it is governed by county council members that act in the same way that other agency board members do, such as approving budgets and fare increases. The nine council members have a budget of approximately $500k per year for communications and staffing. Many of them have a transportation expert on their staff.[55]

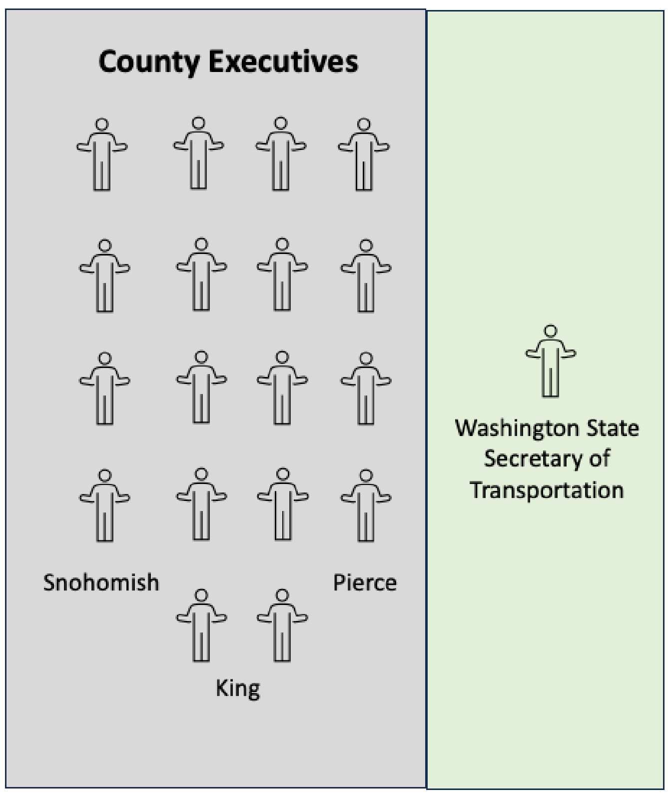
Metro has numerous standing and temporary committees. Key committees include the Regional Transit Committee, focused on transit services and made up of county council members and local elected officials. Three different transportation boards focus on the northern, eastern, and southern portions of King County and are made up of elected officials, transportation agencies and the private sector. Metro staff meets with and briefs these boards (whose members are nominated by council members) every month and takes their input seriously.[56] King County's Auditor's Office conducts audits of individual projects and portfolios of similar projects. It also recommends improved policies and procedures related to cost estimating, scheduling, risk management, and other key practices.[57]

In 2019, the King County Council directed Metro to develop a framework for the equitable and sustainable implementation of mobility services.[58] Metro developed the framework (which includes principles and recommendations) with a newly established Mobility Equity Cabinet. The cabinet's members are community leaders who represent low-income populations, communities of color, immigrants and refugees, limited English-speaking populations, and people with disabilities. Metro's Strategic Plan and its Service Guidelines now incorporate the Mobility Framework. The guidelines are used to evaluate, design, and modify transit services to meet changing needs.[59] When Metro makes major service changes, it conducts an equity impact review. Each project establishes equity-focused goals to guide service planning, scenario development, and engagement.[60]

Metro's current operating budget is $2.1 billion.[61] Metro's fund management policies, adopted by the King County Council, require Metro to maintain a farebox recovery ratio of at least 25%, with a target of 30%.[62] Recently, it has been about 8%.[63] About half of Metro's fare revenue is paid by businesses and institutions, including many of the region's largest employers such as Amazon and Microsoft, as well as major institutions like the University of Washington. Its capital program for 2019-2024 is about $2 billion and Sound Transit pays for capital expenses associated with its services that are operated King County Metro.[64]

The region came to rely on bus services after voters rejected referendums to build rail in 1968 and 1970.[65] In 1992, the Washington state legislature authorized King, Pierce, and Snohomish counties to create a regional transit authority to plan, build and operate a high-capacity transit system. The Central Puget Sound Regional Transit Authority, dba Sound Transit, was established in 1993.[66] Sound Transit started its ST Express bus service in 1999 serving the three counties, but operating mostly on freeways. As light rail projects come online, many of these express buses will be eliminated because the light rail lines provide similar service.[67]

Sound Transit has an 18-member board of directors that serve four-year terms. County executives must appoint members from their county who are current local elected officials, in proportion to the population in Sound Transit district. Currently, there are three members are from Snohomish County, 10 from King County, 4 Pierce County. The last seat is held by the Washington State Secretary of Transportation. Members receive nominal compensation for travel, unless they are full-time elected or government officials.[68]



Constitution of Sound Transit Board of Directors

The Sound Transit board selects its chair from its members, currently the King County Executive serves as chair. The chair rotates every 2 years, historically between the county executives of the three counties. A majority of the Board is required for approval of resolutions and motions, and two-thirds of the entire board is required for major decisions (system plan adoption and amendment; system phasing decisions; annual budget adoption; authorization of annexations;

modification of board composition; and executive director employment). Generally, board members work towards compromise before meetings. A Community Oversight Panel monitors Sound Transit and its members are appointed by Sound Transit ‘s Board of Directors.

Sound Transit contracts out and evaluates its service every year, and proposes changes to improve performance, respond to ridership trends and make the most of its resources. The 2022 Service Plan called for service increases on a number of key routes, but persistent pandemic challenges and operator shortages have delayed those improvements. Its 2023 operating budget is $2.7 billion and is supported primarily through a regional sales tax ($1.7 billion), motor vehicle excise tax ($381 million), federal grants ($282 million), and property taxes ($170).[69] The budget for the 2023 capital program is $2.4 billion with most of it allocated towards expansion projects ($2.1 billion) and the rest for enhancement, state of good repair, and administrative expenses.[70]

Employers in region (notably the region's largest tech companies such as Amazon and Microsoft) operate their own shuttle buses that can stop at most public bus stops. The buses carried approximately 10,000 riders before the pandemic.[71] The shuttles operate under an agreement with Metro and under Metro's supervision. The services are not available to the public at-large and their routes and schedules complement and do not duplicate existing transit services.

In March 2023, King County Metro launched an app-based on-demand ride service that costs users same as bus fare. The app generates routes for riders using rail, bus, and Via vans. A private firm, Via, is managing and providing rides in 31 minivans in areas lacking bus or rail transit options. On-demand service is only available within 7 areas of King County and trips must stay within zone. The county is paying $7 million per year for the program.

In 2022, the state passed a transportation package (Move Ahead Washington) that will provide $3 billion for public transportation over 16 years. It includes a $5 million/year transit coordination grant program over 16 years.[72] Projects recently awarded include integrated marketing efforts around ORCA fare products and a study to explore merging service provided by two agencies.[73] While the head of the WSDOT sits on the Sound Transit Board, no state funding is currently in place to support Sound Transit's infrastructure expansions.[74] WSDOT has a State Safety Oversight Program for rail transit agencies, including investigating accidents and overseeing implementation of safety plans. The region's agencies were compelled to adopt a zero-fare-for-youth policy by October 1, 2022 in order to obtain state funds.[75]

Per state law, worksites in the most populous counties (with 100 or more full-time employees who begin their shift between 6 and 9 a.m. on weekdays) must develop and manage their own programs to reduce the number and length of drive-alone trips. Employers must conduct surveys every other year to measure vehicle miles traveled and mode choices, and appoint an employee transportation coordinator whose contact information is prominently displayed at each worksite. Municipalities develop their own ordinances with a list of mandatory program elements, and information distribution requirements for employers.

Coordination: Working together as one

Seattle is known for its open, and deliberate decision making. The term "Seattle Process" or "Seattle Way" refers to the slow process of dialogue, deliberation, and participation before making any decision and the time it takes to enact any policy. In this spirit, Sound Transit has extensive outreach into its planning process and needs support from a wide range of players for its expansion projects.

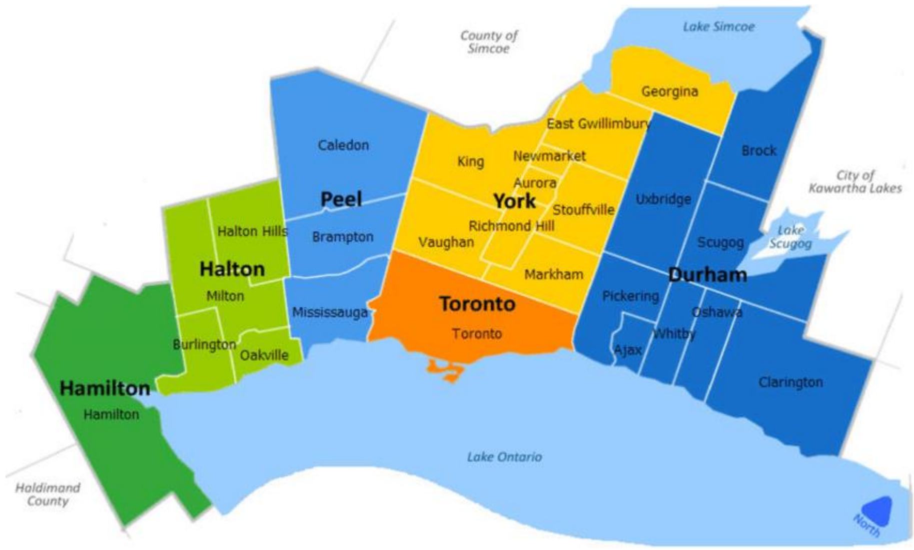
Sound Transit coordinates with cities, counties, state, Puget Sound Regional Council, local transit agencies and advisory committees on routes, stations, and access improvement for cars, buses, bikes, and pedestrians.[76] For its part, King County modifies Metro's bus routes to take advantage of new rail lines.[77] Similarly, Sound Transit worked with the state DOT to repurpose shoulder lanes for HOV and transit use.[78] Coordination between the transit agencies and Sound Transit is strengthened because of the requirement that at least ½ of Sound Transit appointees from each county shall serve on the governing authority of a public transportation system.[79] State DOT is required to annually summarize coordination of public transit through integrated marketing efforts, alignment of fare structures, service and long-range planning, and internal business structures.[80]

The region's transit agency executives have been meeting on a regular basis for decades. In 2019, leaders representing eight transit agencies, WSDOT, and PSRC formalized their ongoing executive-level collaboration in a charter document for Mobility Partnership. The charter identifies a leadership mission statement and objectives.[81] Because the chairmanship rotates between the county executives (or their designees), Sound Transit and the counties appear to have a good working relationship. A King County official referred to its long relationship with Sound Transit akin to a common law marriage – they have squabbles on minor issues, but usually resolve them. He said the county executive of King County (also the Sound Transit chairman) "ordered" King County Metro and Sound Transit to "work together as one."[82]

The Seattle region uses a contactless cash-free fare payment option—Orca card—with free transfers between agencies and multiple pass options.[83] Orca can be used to pay for trips on Community Transit, Everett Transit, King County Metro, Kitsap Transit, Pierce Transit, Sound Transit, Washington State Ferries, and the Seattle Streetcar and Monorail.[84] The ORCA Joint Board, created in 2003, oversees design, implementation, operation, and maintenance of the ORCA system. Membership on the Joint Board consists of one executive from each of its participating agencies.

Funds received from the purchase of regional passes are allocated in proportion to the total value of services used on each agency's facilities during the period in which the pass is valid.[85] Businesses can purchase passes for unlimited rides on bus light rail, commuter rail, and monorail for their employees with the cost determined by each employer's location. Some employers give passes free, others require employees to pay for a portion of the cost. In Seattle, starting in 2023, all public housing residents (approximately 10,000 people) receive a zero-fare ORCA cards at an estimated cost to taxpayers of $2.2 million per year. The 3-year program is paid for with funds generated by voter approved sales tax that expires in 2027.[86]

Greater Toronto



Transit dynamics in the Greater Toronto region are characterized by two very large transit agencies: one controlled by the city of Toronto and the other by the province of Ontario (covering a geographic area more than 7 times the size of Illinois). The provincial government has also recently taken steps aimed at cutting timelines on major projects, most notably by creating a separate, expedited environmental review process for transit and giving public entities considerably more power over utility relocation, property acquisition, and the ability to utilize municipally-owned right-of-way.

The Greater Toronto and Hamilton Area has two major transport agencies. Metrolinx owns GO Transit which operates commuter rail and bus services. The Toronto Transit Commission (TTC) operates subway, bus, streetcar, and paratransit services in the city of Toronto and along its borders. Per the Canadian constitution, responsibility for intra-province transportation is delegated to the provinces, while the national government primarily oversees international and inter-province transportation services. Today, Toronto is home to an extensive, 48-mile-long subway network, consisting of four lines that serve 75 stations. The region is currently undertaking an ambitious building program of subway, light rail and commuter rail lines that will result in more than 180 miles of new rail lines and 100 new stations, along with transit oriented development.[87]

Metrolinx and Toronto Transit Commission

Metrolinx is a provincial agency that serves as the regional transportation authority for the Greater Toronto and Hamilton Area (GTHA). It was created by the province of Ontario in 2006 to improve the coordination and integration of train and bus service for the region. In 2008, it released the region's first-ever transportation plan, dubbed the Big Move, and set out a series of major investments for the region. In 2009, Metrolinx was merged with GO Transit.[88]

Metrolinx was given responsibility for planning and implementing numerous major transit expansion projects and initiatives in Ontario, along with other responsibilities including developing a common regional fare system and acting as a central procurement agency for local transit systems. In 2018, the mandate of Metrolinx was trimmed to give it authority over transit planning, rather than multi-modal transportation planning.[89]

Metrolinx is governed by a board of up to 15 citizen members who must be recommended by the Ontario Minister of Transportation and approved by the appointed by Lieutenant Governor in Council (this is mostly ceremonial role, tasked with carrying out the King's duties.) Prior to 2009, the board was largely made up of mayors and other elected officials from the region. After the merger of Metrolinx and GO Transit, the board's structure changed, and elected officials were removed. Current board of directors are mostly private sector leaders, with experience in finance, public-private partnerships, communications, engineering, railroad operations, labor relations, infrastructure development, and technology. Elected and government employees may not serve on the board and members serve without compensation.

Metrolinx is responsible for the planning, design, and construction" of light rail, subway, and commuter rail expansion projects worth nearly USD $30 billion. Metrolinx uses a methodology to evaluate projects that includes multiple factors such as ridership, costs, reduced emissions, and travel time savings. However, its evaluations have been subject to political interference and changes in political leadership that can lead to projects getting modified or canceled.[90]

For example, 2018 Ontario's auditor general concluded in 2018 that Metrolinx inappropriately recommended that the province build two new stations under pressure from the former transportation minister. She said that Metrolinx "undermined its own decision-making process and inappropriately changed its recommendations...Metrolinx's initial business cases concluded that the stations' costs and disadvantages significantly outweighed their benefits.[91] The auditor general reported that Metrolinx revised documentation about the stations to obscure its business-case analysis. [92]

The Toronto Transit Commission (TTC) is the exclusive local public transit operator for the city, and accounts for the about 85 percent of all public transit trips in the region. TTC is governed by a 10-person board, appointed by the Toronto City Council (four are public members and six are City Councilors). Public members of the board are selected based on prior experience to collectively represent a range of skills (e.g., planning, finance, construction). Decisions are based on majority vote. TTC has a 15-year capital investment plan, updated evert year. About two-thirds of the current plan is unfunded. [93] TTC's plans and budgets must be approved by both its board and Toronto's city council. The city's Auditor General is responsible for conducting financial, compliance, and performance audits of the TTC.[94]

Infrastructure Ontario (IO) is a state-owned enterprise (referred to in Canada as a Crown agency) overseen by the Ministry of Infrastructure and serves as the primary procurement lead for major public infrastructure projects using public-private partnerships. IO also manages the province’s real estate portfolio, provides long-term infrastructure loans to public sector clients, and provides assistance for commercial projects. IO has taken on a greater role in public transit projects amid the region’s shift towards utilizing public-private partnerships.

Coordination: Better integration a goal but not yet a reality

There are currently 11 different ways that fares are determined in the region, with each transit service provider setting its own rules and prices. Transit fares vary based on different service categories and are based on zones. Commuters using GO Transit have not had to pay a transfer fare to another regional service since March 2022. But TTC was omitted from that initial rollout and its riders have continued to have to pay twice, even in cases where their journeys begin and end in Toronto.[95]

PRESTO is an electronic payment system that works on Metrolinx and TTC services as well as other operators in Ontario (including in Ottawa which is 280 miles from Toronto.) PRESTO allows customers to travel seamlessly across multiple transit agencies with the one electronic fare card by tapping their card at stations and on buses. Customers can have money automatically loaded to their cards when their balance falls below a minimum amount that they set. PRESTO cards can be set to either English or French, and the language setting determines the display language shown on PRESTO devices when they are tapped. Riders can also use credit cards, smart phones, and smart watches (with Apple Pay & Google Pay) to tap on a PRESTO reader and pay for their transit fare.

Local transit agencies in the region have long argued that the cost of lost revenue from eliminating so-called double fares was a key barrier to fare integration. Some fear that provincial administration of fare integration could reduce their independence to operate on their own schedules or set their own fares.[96] In March 2023, the head of the Ontario government committed to integrating transit services and fares across the Greater Toronto Area by the end of 2023. Details have not yet been released but the Ontario government said they will fully fund the initiative.[97]

In 2017, the city of Innisfil, located about 50 miles north of Toronto, set up a program to provide transit services to its residents via Uber rather than operate its own transit system. The service offers residents flat fare rides to and from popular destinations (e.g., $6 to GO train station, $5 to closest GO bus stop, and $4 to recreational complex, town hall, library and community center). Other trips are discounted. Riders without a smartphone can call a toll-free phone number. Each resident can take up to 30 trips each month, although some individuals can take up to 50. The average subsidy of $9 per trip. In 2023, Innisfil's service is expected to provide 70,000 trips for 5,000 riders.

Greater London

London Boroughs & Districts Map

London's regional governance is unlike any in the United States and was heavily influenced by late twentieth century politics. From 1963 to 1986 the Greater London Area was governed by the Greater London Council. Ken Livingstone, a member of the Labour Party and a London leader, championed social policies that were at odds with the Conservative majority in Parliament, led by Margaret Thatcher. The Thatcher Government argued for the abolition of the centralized, regional Greater London Council. The white paper asserted that the existence of the Council could not be justified as it only provided 16 percent of the services in its area, with the majority of the remaining being provided by the London boroughs and the metropolitan district councils. The Conservative majority narrowly passed the Local Government Act of 1985, officially abolishing the Council, leaving most of its powers to the 32 London boroughs.[98]

In 1997, Thatcher was replaced by Tony Blair's Labour Government. Dissatisfaction with the lack of regional government—the business community blamed it for London's decline on the global stage—led to the commitment to bring back London-wide Government. A 1998 referendum resulted in 72 percent approval of the proposal and the Greater London Authority (GLA) was born.[99] The GLA uses a mayor-council structure, similar to many U.S. cities. The executive branch is led by the Mayor of London and a 25-member London Assembly checks the power of the Mayoralty. Under the GLA's jurisdiction, the 32 boroughs each have their own councils and municipal planning authorities and their transport strategies must conform with the mayor's transport strategy.

Transport for London

Transport for London (TfL) controls most of the transit services including the London Underground, Docklands Light Railway, buses, trams, and river services. Beyond transit, TfL also has responsibility for principal road routes, cycling provisions, and taxis. TfL is *not* responsible for the National Rail services but it does operate the London Overground and Elizabeth Line services that provide service on parts of the national railway network. TfL was created in 2000 in response to the Greater London Authority Act of 1999, and it inherited many of its responsibilities from its predecessor London Regional Transport.[100] Once a year, the mayor sets fares for all transit services, based on advice from TfL.[101]

TfL's board is comprised of 17 members, each of whom serves at the pleasure of the mayor (who also selects the chair) typically for two to four years. The current mayor, Sadiq Khan, appointed himself as chair of TfL, as all mayors have done since the creation of the GLA. There are no specific qualifications or eligibility requirements for board members, but current board members include business and transport leaders in both the public and private sectors. Members are paid about USD $20,000 each year. Although the board is controlled by the mayor, board members in recent years have not been a rubber stamp body and have established their own priorities.[102]

In 1984, the London Regional Transport Act deregulated bus service and it began to be contracted out to private concessionaires. At present, bus service is contracted out to a total of 17 private entities.[103] The London Underground is the only service that continues to be operated by TfL, with all other services being contracted out. TfL sets standards for size, emissions, etc., and operators are paid and incentivized based on performance (such as punctuality and customer satisfaction). The network is constantly being refranchised on a rolling basis. From the customer perspective, the bus system appears to be a seamless network, and customers might not necessarily know the firm operating their service.[104]

TfL's 2023/24 proposed operating budget is about USD $10.4 billion. About two-thirds of the revenue has historically come from passenger fares, though during the pandemic an "extraordinary" grant from the national government covered about 42 percent of the revenues in 2020 and 2021. While the UK parliament has not historically played a role in transit governance in London since they created the GLA, the financial challenges of the pandemic have required contentious deals between Parliament and TFL for operating subsidies to offset depressed fare revenues. This funding was conditional on TFL raising fares and reducing free travel entitlements for children and pensioners.[105]

The TfL board is responsible for approving the capital budget which is put together in line with the Mayor of London's Transport Strategy. Planned capital expenditures is 2023/24 are about USD $1.5 billion for rolling stock and signaling upgrades as well as other enhancements.[106]

TfL is also responsible for operating the region's Congestion Charge. Motor vehicles entering Central London between during the traditional workday and on weekends in the afternoon must pay a charge of about $18.50.[107] The first charge was introduced in 2003 (only four years after the Greater London Authority Act was passed) and TfL intentionally and aggressively expanded the transit network prior to the launch of the zone. It added 300 new buses, froze transit fares, provided better travel information for transit users, improved transit frequency, and conducted better traffic management in order to make public transit easier, cheaper, faster, and more reliable.[108]

In the fiscal year ending March 31, 2022, congestion pricing in the London area brought in a net revenue of about USD $392 million for TFL. Traffic was reduced by about 30 percent and transit service and reliability were greatly enhanced.[109] London is also charging an additional fee to vehicles that do not meet strict emission standards; this brought in net revenues of over $180 million. Low emission zone programs are a popular incentive program in European cities to encourage people to drive more fuel-efficient vehicles in urban cores.[110]

Coordination: One mega agency with vast authority

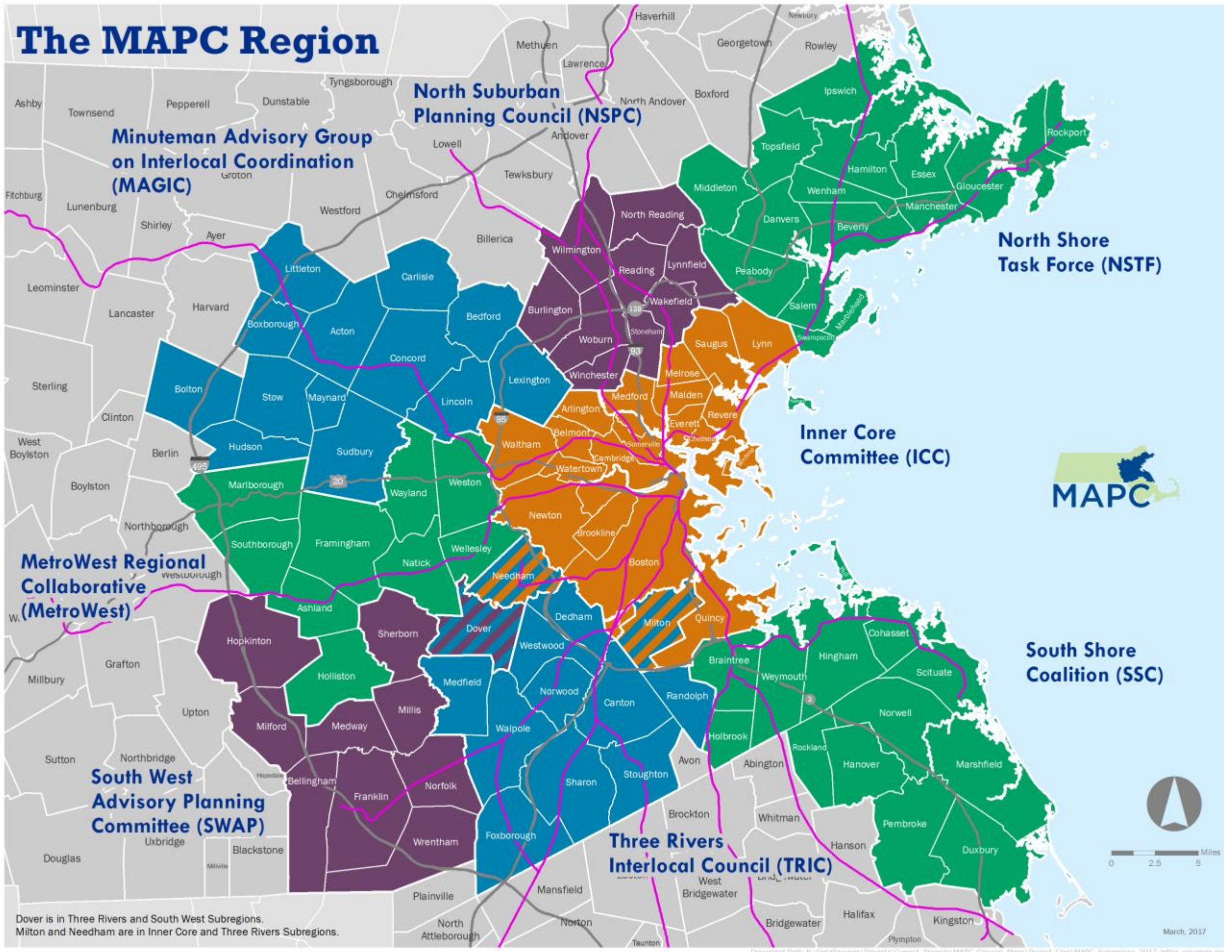
Like many other western European regions, fare payment is seamlessly integrated across most, if not all, services in the region. The Oyster card, a contactless smart card, can be used on all TfL's services as well as most National Rail services in London. Contactless credit and debit cards as well as mobile payments (e.g., Apple Pay and Google Pay) can also be used. TfL sets the fares which are automatically capped based on zones and time of day. Caps are set for both daily and weekly trips.

Land use planning and transportation planning are integrated between the 32 boroughs and the Greater London area. The mayor is the decision-maker for major infrastructure and housing developments. Although TFL does not control streets owned by the boroughs, it has been able to develop an integrated bicycle and bus lane network because the boroughs have to be in conformity with regional plans and TFL funds the improvements.[111]

According to a former TFL official, this "lock between spatial and transport and lock between local and regional" should be a model for other cities and it exists in only a few places in the world." This would not have happened voluntarily (because the boroughs would have resisted having their power usurped). It only occurred because of the abolition of regional governance leaving a clean slate for the governance to be created.[112]

While more than 5 million people in the London urbanized area live outside of the GLA, there is no formal coordination of transport planning between municipalities within the GLA and those outside of it.

Metropolitan Boston



The first subway in America was built in Boston, Massachusetts in 1897. Today, the Massachusetts Bay Transportation Authority (MBTA) is one of only two agencies in the country to operate all five types of major mass transit service: light rail; heavy rail; commuter rail; trolley; and motor bus, including bus rapid transit. The agency also provides paratransit and ferry services. The MBTA has been a state-level division within the Massachusetts Department of Transportation (MassDOT) since 2009. The MBTA was previously known as the Metropolitan Transit Authority, which was a combined agency that formed when formerly private companies folded.

Massachusetts Bay Transportation Authority

MBTA governs, funds, and operates nearly all transit service in the highly-fragmented Boston region, providing service to 176 cities and towns and to jurisdictions in the neighboring state of Rhode Island. Some smaller towns on the outskirts of the MBTA service area operate weekday bus service, but the vast majority of the region's transit is provided by the MBTA.

When Governor Deval Patrick entered office in 2007, one of his key priorities was to reform the various state transportation entities into a *system* instead of mutually exclusive modal administrations. Creating a single MassDOT that controlled the state's modal entities was part of that goal. But more pressing was to respond to increasing financial pressure on the Massachusetts Turnpike Authority. Difficulties maintaining the Central Artery Tunnel system—for which only part of the system was tolled and thus unable to generate sufficient toll revenue—added urgency to the need for structural reforms to the governance and finance of the entire transportation system in the Commonwealth.[113]

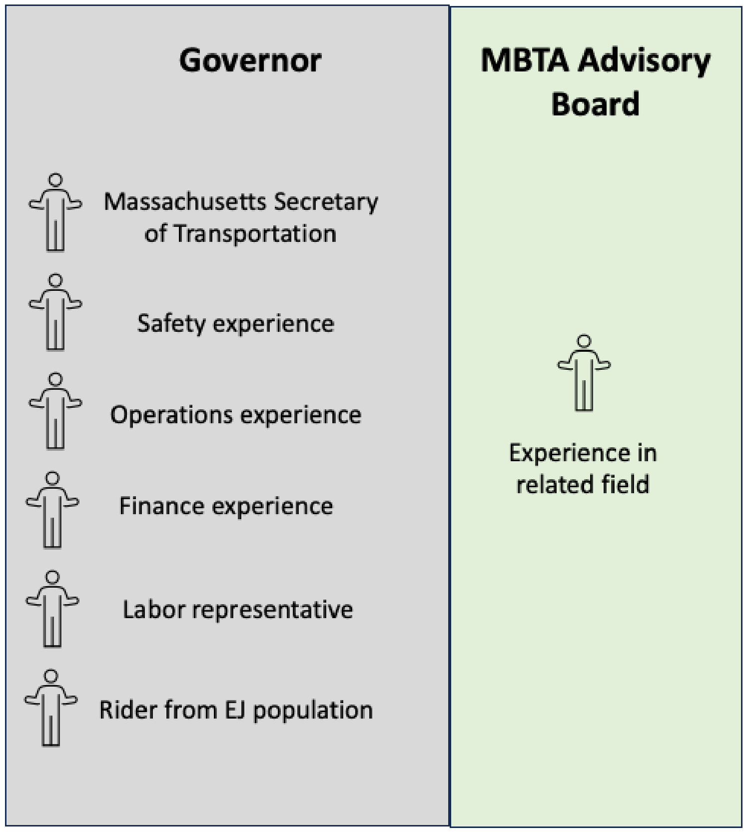
In 2009, the legislature created MassDOT by merging the Turnpike Authority, Executive Office of Transportation (which carried out roles similar to a traditional DOT), Massachusetts Highway Department, MBTA, and Registry of Motor Vehicles. The new structure was intended to provide more coordination between various modes and financial stability to the individual organizations.

The reform was not specifically targeted at MBTA, though it did affect its overall governance. The MBTA board was merged with a newly-created MassDOT board, which oversaw the entire agency. The MBTA's General Manager would also serve as the Rail and Transit Administrator. Some of the largest challenges associated with the merger include aligning culture and employee compensation structures between the various agencies. Some of these challenges still remain.

Today, the MBTA is governed by the MassDOT board, which consists of 11 members directly appointed by the governor. Members serve staggered four-year terms and are required to fulfill specific criteria with expertise in transportation, finance, and/or engineering.[114] The secretary of MassDOT serves as chair. The MBTA's planning staff implement decisions primarily made at the state level. MassDOT is responsible for transit expansions and planning decisions affecting capital development and transit operations. The board also oversees MassDOT's other divisions, including highways, aeronautics, and the Registry of Motor Vehicles. The secretary of MassDOT also serves as chair of the Boston Region MPO, of which MassDOT holds five of 22 total voting seats.

After the 2009 restructuring through 2015, the MBTA lacked a governing entity directly responsible for overseeing budgeting, capital planning, or contracting. In 2015, Governor Charlie Baker convened a special advisory panel of transportation and municipal finance experts to conduct a diagnostic review of the MBTA's operations. The panel released a report outlining issues within the agency, including an unsustainable operating budget, capital underinvestment, slow project delivery process, and poor accountability. Among the panel's recommendations was the creation of a five-member Fiscal and Management Control Board (FMCB) in addition to reconstituting the MassDOT Board to make it more representative and effective by increasing the number of members, changing terms to align with the governor's term, and appointing the secretary of transportation as chair.

In 2021, an MBTA Board of Directors replaced the FMCB. It consists of seven members, including the MassDOT Secretary and one member with municipal government experience in the agency's service area who is appointed by a vote from the MBTA Advisory Board. The rest are appointed by the Governor, and they individuals with expertise in safety, finance, operations, and a resident of an environmental justice population, and a person recommended by the President of the Massachusetts State Labor Council, AFL-CIO. At least one of the people appointed by the Governor must live or work in a different service area than the member appointed by the MBTA advisory board, and at least two of the appointed members shall also be members of the board of directors of MassDOT. No more than 4 members can be enrolled in the same political party.[115]



Constitution of Massachusetts Bay Transportation Authority Board of Directors

The MBTA Advisory Board is one of the few formal lines of representation for riders and the public. It consists of one voting member from each of the 176 cities and towns in the MBTA system and was created in 1964 to provide technical assistance and oversight over the MBTA's expenditures. Voting members are typically the chief elected official or city manager of each city or town, or their designee (who must be a rider). Each municipality is granted one vote in addition to a fraction of votes equivalent to their weighted proportion of the MBTA's deficit. Prior to 2009, the Advisory Board held veto power over the agency's budget and capital plan but can now only voice concerns to the MassDOT board.[116]

The MBTA Advisory Board makes up 14 of the 22 votes on the Boston Region MPO. The MPO has discretion over a portion of federal transportation funds referred to as regional target funds. The MPO's 2023-2027 regional target allocation sets aside $75 million for transit modernization projects.[117]

The MBTA receives a significant share of its operational and capital funding from state sources, and Federal assistance comprises over half of its capital expenditures. This stands in contrast to many transit agencies that typically receive a significant amount of local funding. The agency's primary funding sources include a dedicated state sales tax, contributions from local governments (a relatively small share of revenue), farebox revenue, and appropriations from the state government.[118] The 176 cities and towns that receive MBTA service contribute to a Local Assistance Fund, which comprises about 10 percent of MBTA's operating budget. The contributions are based on each municipality's weighted percentage of the total population in MBTA's service area and indexed to inflation annually.[119]

For years, the agency's annual deficit was covered by the state through the annual appropriations process. But in 2001, the legislature passed a "Forward Funding" bill that dedicates 20 percent of all sales tax collected in Massachusetts to the MBTA, aiming to provide more certainty and stability to the agency's finances. It also mandated an annual, population-based assessment fee that the 175 cities and towns in the MBTA service territory must pay to be part of the MBTA system (through whatever means they see fit). However, this revenue did not grow as expected and led the agency to instead use its borrowing capacity to cover operating deficits. After the creation of MassDOT in 2009, the MBTA received an additional $160 million from the state each year to help cover gaps in the budget (the additional appropriation has since grown to $187 million).[120]

Coordination: Coordination through consolidation

Boston offers an example of coordination through consolidation. This has the benefit of giving the state a vested interest in funding the Boston region's transit system, but it also has the drawback of diminishing the influence of localities. Due to the state's large financial role, localities also do not make a significant financial contribution to the transit system, further undermining their ability to play a meaningful role in regional planning and investment decisions. However, the MBTA also derives some revenues indirectly from tolls by virtue of being housed within the same agency as the tollway authority. A dedicated source of funding, such as surplus toll revenues, can help give agencies independence to make its own investment decisions.

Not all regions can create a single unified organization, nor would this necessarily be desirable, especially in larger states with multiple metropolitan areas. On the other hand, in some regions the fragmentation and redundancy caused by multiple agencies creates undue challenges.

Given substantial state-based funding, there is relatively little debate over whether the distribution of state funds for transit projects is equitable. Many states, including Illinois and New York, regularly have to address equity issues, particularly with respect to transit funding, in terms of trading off urban versus rural interests. In Massachusetts, these debates are not as prevalent because the western part of the state generally recognizes the need for the MBTA and its essential role in the state's economy. Thus, stakeholders outside the greater Boston region do not pose a substantial obstacle to state funding for the agency. However, a budget gap could erupt as early as FY25 or FY26, and reach anywhere between $321 million and $501 million by FY27, according to the agency's long-term projections.[121]

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